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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/667,937	GREYWALL, DENNIS S.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tuyen Q Tra	2873	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/22/2003.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☒ The drawings filed on 22 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>0903</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                           | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

**DETAILED ACTION**

**Reason For Allowance**

1. Claims 1-25 are allowed.
2. Following is an examiner's statement of reasons for allowance:

The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 1, 16 and 25, which include (claim 1) an optical grating adapted to disperse in wavelength light received from a sample; a movable plate having one or more openings corresponding to one or more special features of a target substance, wherein the movable plate is located between the grating and one or more photo-detectors and is adapted to pass light through said one or more openings to the photo-detectors; (claim 16) dispersing in wavelength light receive from a sample; imaging dispersed light onto a movable plate having one or more openings corresponding to one or more spectral features of the target substance; and measuring light passing through the one or more openings using one or more photo-detectors; (claim 25) means for dispersing in wavelength light received from a sample; means for imaging dispersed light onto a movable plate having one or more openings corresponding to one or more spectral features of the target substance; and means for measuring light passing through the one or more openings.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2873

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Brand et al. (US Patent 6,064,488A) discloses a method and apparatus for in situ gas concentration measurement in figure 1 comprising of the gas measurement apparatus shown includes a laser (item 11), a beamsplitter (item 12), a reference cell (item 13), a reference detector (item 14), an optical fiber (item 15), a sampling cavity (item 16), a sample detector (item 17) and a null detector (item 18); however, Brand et al. does not teach or suggest an optical grating adapted to disperse in wavelength light received from a sample; a movable plate having one or more openings corresponding to one or more special features of a target substance, wherein the movable plate is located between the grating and one or more photo-detectors and is adapted to pass light through said one or more openings to the photo-detectors.
- b) Cederstrand et al. (US Patent 5,512,757A) disclose a spectrophotometer and optical system therefor for the optical system of the photometer comprises three general groups, a source group 10, a conventional sample cell 12 and a detector group 14. The emission source group 10 includes a deuterium lamp 16 for the emission of a beam 18 of ultraviolet radiation. In the preferred embodiment the deuterium lamp 16 is pulse; however, Cederstrand et al. does not teach or suggest means for dispersing in wavelength light received from a sample; means for imaging dispersed light onto a movable plate having one or more openings corresponding to

Art Unit: 2873

one or more spectral features of the target substance; and means for measuring light passing through the one or more openings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen Tra whose telephone number is (571) 272-2343. The examiner can normally be reached on Monday to Thursday from 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps, can be reached on (571) 272 - 2328. The fax number for this Group is (703) 872-9306.

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October 28, 2004



Hung Xuan Dang  
Primary Examiner